THE GENESEE FARMER

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THE GENESEE FARMER.

SATURDAY, DEC. 6, 1834.

"Essay on Calcareous Manures."

This is the title of a duodecimo volume of 242 pages, published more than two years ago, by EDMUND RUFFIN, editor of the *Farmer's Register* in Virginia. It is more particularly designed for the Tertiary Formation of the maritime States; but we have no hesitation in saying that it ought to be read by every farmer who wishes to understand the nature of manures, and to know how to apply them to the best advantage. It is an original work of great merit. The author is not a mere theorist, proposing plans for others to follow; but a practical farmer who has thoroughly inquired into the causes of the sterility that has long overspread the tide-water districts; and who has led the way in a course of improvements which must materially change the condition of that country.

His chemical experiments on various soils have produced some very unexpected and surprising results. For instance: He finds a total absence of calcareous earth in all *their* poor soils, and also in many rich soils: and it is particularly worthy of notice that some of these specimens were obtained in the near vicinity of limestone rocks. Our author says, "Before the first of these trials was made, I supposed (as probably most other persons do) that limestone soil was necessarily calcareous,* and in a high degree." His experiments have shown however, that this is a mistaken notion. One sample was taken from a piece of land so rocky with limestone as to be unfit for the plough, and yet one thousand grains of the soil yielded only one grain of calcareous earth. Various other specimens have shown a total destitution. Brown loam from the Sweet Spring valley, remarkable for its extraordinary productiveness and durability, which must have been often covered and saturated with mineral waters holding lime in solution,—yielded not a particle of calcareous earth. The same result was obtained from various soils, some lying on the surface of limestone; others taken from between masses of that rock; and our author after detailing the particulars, remarks: "Thus it appears that of *nineteen* specimens of soils, only *four* contained calcareous earth, and *three* of these in *exceedingly small* proportions. It should be remarked that all these were selected from situations which from their proximity to calcareous rock, or exposure to calcareous waters, were supposed most likely to present highly calcareous soils. If five hundred specimens had been taken without choice, from what are commonly called limestone soils, the analysis of that whole number would be less likely to show calcareous earth, than the foregoing short list."

We confess these results were new to us; and our curiosity was excited to ascertain if the rich limestone lands of the Genesee Country were in the same condition. On selecting specimens from an old field, at the different depths of *four* and *seven* inches, which we should not hesitate to call a limestone soil, to our surprise, these specimens when treated with muriatic acid, gave no indication of calcareous earth; and on procuring others from a dark rich loam amongst broken limestone partly disintegrated, the effervescence was but barely visible. On digging down into the subsoil however, and subjecting a specimen to the same treatment, the carbonic acid foamed in the glass. We are therefore prepared to adopt the conclusion of our author, that calcareous matter when mixed with the soil, soon becomes converted into the oxalate of lime* and the unchanged state of *that* subsoil, from not having been penetrated by the vegetable acids, may be offered as additional evidence.

He has not left this opinion however, unsupported by direct experiments. To an acid soil, full of vegetable matter, he applied fossil shells at such a known and heavy rate as would have given to the soil (by calculation) at least three per cent of calcareous earth to the depth of five inches. After the field had been cultivated six years, the soil was examined; and in the first experiment 1000 grains only yielded eight of calcareous matter; the second experiment only seven grains; and in the third, 1500 grains produced seventeen and a half. The average is thus considerably less than one per cent; and shows that more than two per cent of calcareous matter had undergone a new combination.

As a sample of our author's manner of treating a subject, we select a "Note" in the appendix on the application of Gypsum. In the lower parts of Pennsylvania, *liming* has been found to insure the efficacy of that wonderful manure; and some of our readers may recollect that our correspondent J. SPICER (Vol. 2, p. 165,) has derived great benefit from mixing *ashes* with it before sowing. How these operate, we think the "Note" (which follows) will satisfactorily explain.

"I do not pretend to explain the mode of operation by which gypsum produces its almost magic effects. There is no operation of nature less understood, or of which the cause or agent seems so totally disproportioned to the effect as the enormous increase of vegetable growth from a very small quantity of gypsum, in circumstances favorable to its action. All other known manures, whatever may be the nature of their action, require to be applied in quantities very far exceeding any bulk of crop expected from their use. But one bushel of gypsum, spread over an acre of land fit for its action, may add more than twenty times its own weight to a single crop of clover.

"However wonderful and inscrutable the fertilizing power of this manure may be, and admitting its cause as yet to be hidden, and entirely beyond our reach,—still it is possible to show reasons why gypsum cannot act on many situations, where *all experience has proved it to be* worthless. If this only can be satisfactorily explained, it will remove much of the uncertainty as to the effects to be expected; and the farmer may thence learn on what soils he may hope for benefit from this manure—on what it will certainly be thrown away—and by what means the circumstances adverse to its action, may be removed, and its efficacy secured. This is the explanation that I shall attempt.

"If the vegetable acid which I have supposed to exist in what I have called acid soils, is not the oxalic (the particular acid in sorrel,) at least every vegetable acid, being composed of different proportions of the same elements, may easily change to any other, and all to the oxalic acid. This of all bodies known by chemists, has the strongest attraction for lime, and will take it from any other acid which was before combined with it—and for that purpose the oxalic acid will let go any other earth or metal which it had before held in combination. Let us then observe what *would be the effect of the known chemical action* of these substances, on their meeting in soils. If oxalic acid was produced in any soil, its immediate effect would be to unite with its preparation of lime, if enough was in the soil in any combination whatever. If the lime was in such small quantity as to leave an excess of oxalic acid, that excess would seize on the other substances in the soil, in the order of their mutual attractive force; and one or more of such substances are always present, as magnesia, or more certainly iron and alumina. The soil then would not only contain some proportion of the *oxalate of lime*, but also the *oxalate* of either one or more of the other substances named. Let us suppose gypsum to be applied to this soil. This substance (sulphate of lime) is composed of sulphuric acid and lime. It is applied in a finely pulverized state, and in quantities from half a bushel to two bushels the acre—generally not more than one bushel. As soon as the earth is made wet enough for any chemical decomposition to take place, the oxalic acid must let go its *base* of iron, or alumina, and seize upon and combine with the lime* that form-

* The term "calcareous" should be limited and restricted to carbonate of lime, lexicographers to the contrary notwithstanding. We are supported on this point by mineralogists who know the importance of precision in language, and who use the terms *calcareous alabaster* and *gypseous alabaster*, although the base of each mineral is *lime*.

* This accords with the assertion of the Earl of Dundonald in his *Connection of Agriculture and Chemistry*: "Much of the oxalate of lime will be formed by adding calcareous matter to ground abounding with plants of sorrel or other vegetables containing the sorreline or oxalic acid." He has referred to no experiments however, in proof of this opinion.

* The Earl of Dundonold held an opposite opinion. He says, "the oxalate of lime may be decomposed by the vitriolic acid, in which case gypsum will be formed;" but we have the authority of Brande for the contrary: "Oxalate of ammonia added to *any* soluble compound of lime produces an insoluble oxalate of lime." Now gypsum is a soluble compound of lime, and therefore the sulphuric (vitriolic) acid will be displaced. He further says "Oxalate of lime may be formed by adding oxalic acid to *any* solution of lime."

ed an ingredient of the gypsum. The sulphuric acid left free, will combine with the iron, or the alumina of the soil, forming copperas in the one case, and alum* in the other. *The gypsum no longer exists*—and surely no more satisfactory reason can be given why no effect from it should follow. The decomposition of the gypsum has served to form two or perhaps three other substances. One of them, oxalate of lime, I suppose to be *highly valuable as a mauure*, but the very small quantity that could be formed out of one or even two bushels of gypsum, could have no more visible effect on a whole acre, than that small quantity of calcareous earth, or farm-yard manure. The other substance certainly formed, copperas, is known to be a poison to soil and to plants; and alum of which the formation would be doubtful, I believe is also hurtful. In such small quantities however, the poison would be as little perceptible as the manure—and no apparen effect whatever could follow such an application of gypsum to an acid soil. So small a proportion of oxalic acid, or any oxalate other than of lime, would suffice to decompose and destroy the gypsum, so that it would not amount to one part in twenty thousand of the soil.

"Why gypsum sometimes acts as a manure on acid soils, when applied in large quantities for the space, is equally well explained by the same theory. If a handful, or even a spoonful of gypsum is put on a space of six inches square, it would so much exceed in proportion all the oxalic acid that could speedily come in contact with it, that all would not be decomposed; and the part that continued to be gypsum, would show its peculiar power, perhaps long enough to improve one crop. But as tillage scattered these little collections more equally over the whole space; or even as repeated soaking rains allowed the extension of the attractive powers,—applications like these would *also be destroyed*, after a very short-lived and limited action.

"Soils that are naturally calcareous, cannot contain oxalic acid combined with any other base than lime. Hence gypsum applied there, continues to be gypsum; and exerts its great fertilizing power, as in Loudon or Frederic [counties.] But even on these most suitable soils, this manure is said not to be certain and uniform in its effects; and of course, more certain results are not to be looked for, with us. I have not undertaken to explain its occasional failures, any more than its general success on the lands where it is profitably used,—but only why it cannot act at all, on lands of a different kind.

"The same chemical action being supposed, explains why the power of profiting by gypsum should be awakened on acid soils after making them calcareous; and why that manure should seldom fail when applied mixed with very large quantities of calcareous earth."

The present autumn in England is said to be like a second spring, cowslip, and primrose blooming, and roses blowing, and laburnums flowering in various places.

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* "Alum is *a triple sulphate of alumina and potassa* [potash.] Sulphate of alumina will not crystalize; but if a solution of potassa be added to a solution of sulphate of alumina, crystals of alum are precipitated." Brande's Manual of Chemistry.

Carpet Manufactory.

We are gratified to learn that the manufactory of ingrained carpets is being revived in the "Globe Building," by Mr. E. D. Smith of this city.

It will be recollected that the business had been brought into successful operation by Messrs. Newell & Stebbins, and that their entire establishment was consumed in the great conflagration of the Globe Building in January last. We understand that the present proprietor has obtained several experienced workmen, in the various branches, from Kilmarnock in Scotland, and that no effort will be omitted to produce an equal if not superior article, to any made in this, or any other country, of the same description. Low priced wool, and domestic spun yarns, will be received in exchange for carpets, and carpets made to order for those who wish to furnish their own stock. It is an important acquisition to the general stock of "home industry," and we wish the proprietor an extended patronage and reasonable remunerations for the enterprise.

To Destroy Vermin on Cattle.

The following is an extract of a letter from our friend, *Edward Garrigues*, of Darby, (Pa.):—

"Observing some observations relating to destroying vermin on cattle, I am also induced to remark, that a cow, much injured thereby, was cured immediately by rubbing down the spine, from head to tail, with Coe Indicus, or rather a decoction thereof, which produced an entire new coat of hair, and changed the appearance of the beast so much for the better, that the former owner would not have known her only by the mark of white on her hide."

From the Maine Farmer.

Unfermented Swill.

A question was asked in one of our late numbers why unfermented swill was not so good for hogs as that which is undergoing fermentation. It is generally considered that swill which is already undergoing fermentation will fatten swine much faster, and, is of course, more economical than swill not in that condition. As no one has appeared as yet for the purpose of answering the question of our correspondent above alluded to, we will venture a few remarks. Vegetable substances contain a large quantity of carbon, and this same substance also enters largely into animal materials, especially into fat and oils, constituting a large portion of these substances. It follows therefore that in animals by the process called digestion, a portion of this carbon of the food is separated and assimilated or converted into chyle and blood, and from these into fat muscle or flesh, and such like materials which make up the animal body. But before the digestive powers can do this, the food must undergo a change, and the carbon contained in it combined with something that will render it easily dissolved in the fluids of the body. Solid carbon is not dissolved in fluids. Charcoal which is one form of carbon, and indeed is nearly pure carbon, we all know is not soluble in fluids, but still, it may easily be dissolved by adding another substance to it. Take a piece of charcoal and burn it in a close vessel and you change its form. It combines or unites with the oxygen or vital air, and is converted from a hard solid visible state into an invisible air or gas called carbonic acid or fixed air, and strange as it may seem, this same substance which a few minutes ago was a lump of charcoal, is now an invisible gas, and the next minute by agitating it with water is absorbed and becomes liquid, and the next minute if drank will be converted into a portion of a walking, living, breathing animal.

To go back to our first remark, that vegetable substances, such as are used for food, contain a large portion of carbon, not in a pure state to be sure, but mingled with many other substances which render it more liable to undergo fermentation. Not what is fermentation? It is nothing more or less than this carbon combining with the oxygen of the air or atmosphere being converted into an air and escaping in the form of bubbles of gas as it works its way up through the mass. The swill therefore that is in this state, is all ready to be dissolved in the fluids of the stomach and converted to the animal body. If it is not yet fermented it will not digest so soon, and of course is not changed to fat so soon, and consequently the hog does not fat so fast. In order to bring on fermentation three things are necessary, viz: moisture, air, and heat, and heat is also engendered by the fermention which serves to keep it up so long as there is any carbon to be converted to gas. And the effects of this fermentation and heat when carried on in the animal stomach is curiously illustrated by the animal itself. Paine Wingate of Hallowell, a highly respectable member of the Society of Friends, and a close observer, informed us the other day that in his experiments in feeding hogs, when he gave his hog swill that was unfermented he would go and lie down on the ground, but when he gave him swill that was fermenting he would lie quietly in his pen on a plank. This difference of conduct is we think accounted for, by the fact that heat is caused by the act of fermention, and when fermentation is carried on in the stomach, Sir Porker finds it necessary to sleep out of doors.

From the Farmer's Chronicle.

Fences.

It is a most erring policy, that induces farmers under the name and notion of *economy*, to inclose their grounds with temporary and defective fences. It is in truth the very worst of economy, or rather, the very reverse of economy. It would be well for those who feel inclined to negligence, or to be governed by the "do-for-the-present" doctrine, to open an account of *debt* and *credit* with their fences for a few years; and if that should not cure them, they might be given up as incurable.

Perhaps some of our readers might be edified by a sight of such an account; at any rate, if it should not happen to suit their own experience, it may give them some idea of this sort of *Book-keeping*: and here it is.

"*Cornfield Fence*, Dr.

To corn destroyed by horses, cattle and hogs at different times, supposed 100 bushels, say $25.

The time lost in stopping *hog-holes*, repairing fences and mending *water-gaps* say six days, in *harvest*, $5.

To wounding one of the plough horses, in breaking over the fence, by which his services

were lost for 10 days when they were most wanted, say, $5.

To price of a hog of my neighbor Hodge, for which I had to pay, having *dogged* it in my cornfield, so that it died, $3.

To time lost in attending a law suit, about said hog, and cost of suit, $5.

To loss of a valuable Dog which I supposed Hodge had killed, in revenge for the killing of his hog by said dog, but which I could not prove, $5.

To perpetual loss of Hodge's friendship, which had been steadfast for twenty years—amount not known.

To the spoiling of my young horses, Smith's cattle and Hodge's hogs, so that I shall never be able to fence them out effectually hereafter—loss not known.

To keeping me in *bad humor*, *fretted* and *crabbed* nearly all summer,—damage incalculable.

Total, exclusive of the three last items $48,00.

Credit,

By 500 rails, the number wanting to make the fence good; but which as they must be finished next spring, are only saved for one year, so that the interest on their cost is the only saving—cost $10—interest 10 per cent. is $1,00.

By labor which would have been required to put the fence in good condition; say $10 at most, but which having still to be done, is only entitled to a credit to the amount of interest as in the former case——— $1,00

Total $2,00

Balance against bad fences $46,00

And the said debtor (bad fences) being utterly *insolvent*, the whole amount is irreparably lost; except, that it has taught a lesson which may be useful hereafter. SYLVESTER SLOVEN.

What came to pass in the case of neighbor Sloven, has happened to many others, and will continue to happen, until proper attention shall be paid to what should be a farmer's first concern, good enclosures. Nothing can be more *unbearably* provoking, than after having toiled all the season to raise a good crop, than to have the whole destroyed in a single night.

But besides the security and actual gain of good fences, nothing more than this contributes to the neatness and good appearance of a farm, and without this it is impossible to do away a repulsive and condemning aspect of slovenliness, which indicates any thing rather than good husbandry.

But if he is censurable, who neglects the enclosures about his fields, meadows and pasture grounds, what shall we say of him whose very garden—a spot which should of all others be *sacred* and secure, is constantly "profaned by *vandal swine*," and suffered to be trodden down by the "beasts of the field?" If he attempt his defence by saying there is nothing in his garden worth protecting, we say this too is his fault, and no less a one than the other. It is like making *drunkenness* excuse *theft*.

By the way, the subject of neatness, taste and utility in family gardens, deserves a fuller notice, and shall ere long have a full chapter. In the mean time let us improve the leisure of this winter in preparing to make all our enclosures substantial and secure before the vernal planting comes about.

From the Northampton Courier.

Culture of Silk.

The Secretary of Hampshire, Franklin and Hampden Agricultural Society, furnishes us with the following facts in relation to Silk Worms and Mulberry Trees:

At the late show of the Hampshire, Franklin and Hampden Agricultural Society, Elizur Goodrich, Jr. Esq. presented a claim for premium on white mulberry set on his farm in Montgomery, in the county of Hampden, and obtained the first premium. He states that in 1833 he had 9000 mulberry trees set on one acre,—the rows 4 feet apart, and trees 12 to 18 inches apart in the rows. In 1834 had 20,000 mulberry trees set on three acres,—the rows 6 feet apart and trees 12 to 18 inches apart in the rows, also 9000 mulberry trees set on 4 acres, the rows 6 feet apart and trees 3 feet apart in the rows; that he planted potatoes between the rows, had a good crop, and found the cultivation of the potatoes was advantageous to the mulberry trees. Expecting to use the leaves in the manufacture of silk, he intends to keep the trees cut down to 6 or 8 feet, for the convenience of gathering leaves. The trees are from 3 to 4 years old and very thrifty.

Mr. Timothy Smith of Amherst, in the county of Hampshire, also presented his claim for premium on the white mulberry, and obtained the Society's premium. He represents that he has 17,443 white mulberry trees, of which 3638 are set out on about 100 rods of ground, in rows 8 feet apart, and the trees 2 feet apart in the rows, residue set more compact for the purpose of topping to feed worms. He planted potatoes between the rows, had a great crop, and found the hoeing among the potatoes was beneficial to the mulberry trees. From the experience he has had in feeding worms, calculates that half an acre set with white mulberry will produce feed for 100,000 worms,—says he has what he considers five species of worms, viz: the Black annual worm, producing *one* crop in a year of *yellow* cocoons, also the Black worm, producing *two* crops in the year of *yellow* cocoons—the Grey worm—the large White and the small White worm, producing two crops in a year of *white* cocoons. The present year has fed only about 30,000 worms, but thinks his mulberry trees might give sufficient food for an *hundred thousand* worms.

He had worms on feed when the late severe frosts came, and gathered a quantity of leaves while frozen, packed them in a sack which had been used for salt; in this state the leaves were kept green and in good condition, so that he fed his worms two weeks with them, and the worms devoured them with the same avidity as before they had been frozen. The frost completely destroyed the leaves remaining on the trees. Mr. Smith now thinks that leaves may be preserved through the winter for winter and early spring use. He has 357 promising seedling plants of the Morus multicaulis, the product of one paper of the Chinese mulberry seed which he had of the Society last spring. On this subject the committee would remark, that from the *source* and *peculiar* circumstances under which the seed was obtained from the interior of China, it is believed to be *genuine*, and not improbable the first good seed imported. The seed has been distributed into several towns in the county, and generally given a good return, unless when planted or sown too deep. Some seed however was lost and did not vegetate in consequence of sowing too deep. The most favorable depth is about one quarter of an inch, regard being had to the soil.

The seedlings of the present year standing some distance from each other, gave out side branches, some of which, as an experiment, were made into cuttings, set in the ground with one bud exposed, and did well, although done in a very hot and dry season, and while the branches were green and tender. Some seedlings of the present year produced leaves measuring 9½ by 8½ inches before the severe frost, and had the weather continued mild a few weeks longer, it is thought some leaves would have attained the size of 12 to 14 inches. Some seed was sent northerly and southerly to a considerable distance, and one parcel to the distance of 5 or 600 miles, and did well. Should no more seed be received from China, there is now a sufficiency of grown trees and seedlings in such forwardness, as in a short time to supply the whole limits of the society with the real Morus multicaulis.

From the Cultivator.

Drying Unripe Corn.

MR. EDITOR—Several methods of drying unripe corn for winter use are recommended, and may be practiced with advantage. Probably the worst of these is the common one of boiling, and afterwards cutting the grain from the cob. The corn is not only deprived of much of its sweetness and flavor by the boiling, but the best, though not the largest part of each kernel, the *corculum*, or as it is called by the farmers *chit*, is left on the cob. A far better plan is that adopted by the Indians of Lake Michigan, who roast the corn in a sand bath heated by a fire which they make on a bed of soft sand, into which the ears are plunged. *After being roasted in this way, it is* removed from the cob and kept in sacks for winter use.

A neater and still better method is, to put the ears of green corn into a *baker*, or oven of any kind, and roast them about as much as you would do for immediate use. The corn is then shelled, each grain being preserved entire, and spread to dry for a few days, either in the open air or a dry room; and may be kept for years. When thoroughly boiled (for at least 12 hours) it is as tender and soft as green corn, to which in flavor it is in no way inferior, and constitutes a most admirable ingredient in soups, or if eaten by itself is one of the most delicious and wholsome dishes that can possibly be prepared.

A diet consisting exclusively of corn preserved in this way is regarded as a specific in the removal of a predisposition to cancer.

Yours, very respectfully,

EDWIN JAMES.

Potatoes,

Planted at one foot deep produced shoots at the end of the spring; at two feet, not till the middle of the summer; at three feet, their roots were very short, and did not come to the surface; below three feet they never vegetated. Several were buried in a garden at three and a half feet, and after two years were found without any germination, but with their original freshness, firmness, and proper taste.—*Ann. Soc. Agr. Fr.*

For the Genesee Farmer.

The Morus Multicaulis, or Chinese Mulberry.

I have cultivated this plant three seasons, during which time it has had the trial of two winters. It is a noble plant, rapid in its growth, producing shoots in abundance, and leaves of enormous size. It is, I believe, satisfactorily ascertained, that its foilage supplies food for silkworms, to say the least, as palatable to the insect, and as wholesome and nutritious, as that of the White Mulberry, and that its produce in silk is not inferior in its quality. The advantages resulting from its introduction, will consist chiefly, in the greater facility, on account of the large size of its leaf, of collecting foilage for silk worms, and applying it to their use.

This plant may be propagated, with great facility and speed, either by layers or cuttings. One good root or stock, after a year's growth, will supply annually 50 layers or more. Yet from a small and successful experiment last spring, I am inclined to think, the better way of propagating is by cuttings. Small twigs without roots, from six to eight inches in length, are carefully placed in the ground, and set so deep, as to leave only one bud, or not more than two, out of the ground. The cuttings used in my experiment, had been taken from their stocks, the autumn preceding, and kept through the winter, under a slight covering of ground. I know not but that they would have done as well, if they had been set in the fall, when they were cut. The danger apprehended was, that the frosts of winter would loosen their position in the ground, and thus injure, if not destroy them. I take off, and secure my cuttings, in the fall, lest, remaining on their stocks, they should receive injury from the winter, and be rendered unfit for use.

Inoculating the Morus multicaulis into the White Mulberry, has been practiced to a considerable extent. I myself have performed this operation, on several hundred trees. But my experiments have furnished no arguments in favor of this mode of propagating. Of more than 200 buds, inserted in the summer of 1833, the most of which appeared well, at the approach of cold weather, only one survived the winter.

After all, it is not, I fear, to be regarded as a settled fact, that the Morus multicaulis can be successfully cultivated in this climate. Both the winters, during which I have had this plant under experiment, have proved too severe for its delicate constitution. The former of the two winters, I had but one tree. The top of that, after having obtained a rank growth, was killed down to about eighteen inches from the ground. The winter next following, that is, the last winter, I had several trees; and the frost affected them all, so severely, as to destroy nearly the whole of their tops. They all sprouted up again, were vigorous in their growth, and, late in the season, produced foliage, in abundance.

Unsuccessful as I have been, in my attempts to cultivate the Morus multicaulis, I am not altogether discouraged in regard to its use, in the climate of this country. I advise to giving it a thorough experiment. It is not unlikely that in many favored locations of Western New York, it will pass the winters unharmed. I should think that, in all places where peach trees have been found uniformly to escape injury by the frosts of winter, the Morus multicaulis would be in little danger, from hostility of climate.

I ought here to remark that, in my nursery, and near the place, where stood the unfortunate Chinese Mulberries, many peach trees of two years growth were, the same winter, entirely killed quite to the ground. Two hundred weeping willows, of one year's growth standing near the same place, were also entirely killed down to their roots. More than 100 quince bushes of two years growth, suffered the like misfortune. A few trees of the White Mulberry, standing among their suffering companions, were also killed.

No wonder that, on battle ground, where destruction was so great and indiscriminate, the Morus multicaulis, a tender exotic from milder climes, should have become a sufferer. On other parts of the same nursery, the frost fell with power far less destructive. Even tender peach trees escaped unhurt. It is, perhaps, rational to hope, that the Morus multicaulis, after having been cultivated in this climate several years, and thus become acclimated, will be hardy enough to resist the frosts of winter, any where in Western New York.

DAN BRADLEY.

Marcellus, Nov. 1834.

For the Genesee Farmer.

Machine for Harvesting Wheat AND OTHER GRAINS.

To the Editor of the Genesee Farmer:

I wrote you last May, that Mr. *Hussey*, the inventor of a machine for harvesting wheat, had left in this village one of his machines, for the purpose of giving our farmers an opportunity to test its value, and I promised to write you farther about it when it had been put to use. For many reasons, which will not interest either yourself or the public, the matter has been delayed till the first rainy day, after my fall work was out of the way, should give me leisure to remember and fulfil my promise.

The machine has been very fully tried, and I am gratified to be able to say, that it has as fully succeeded. Hundreds of farmers, from the different towns of this and the adjoining counties, have witnessed its operations, and all have not only expressed their confidence in its success, but their gratification in the perfection of its work.

As every inquirer asks the same series of questions, I presume your readers will have a like course of thought, and wish for satisfaction in the same particulars. To give them this, I will write them in their order, and give the answers.

Does the machine make clean work?

It saves all the grain; to use the language of a gratified looker on, an old and experienced farmer, "it cheats the hogs."*

Does the machine expedite the work?

What the machine is capable of accomplishing, we who have used it can hardly say, as we had no field, in fit order, large enough for a fair trial through a whole day; and can only say what it has done. Five acres, of heavy wheat on the Genesee flats, were harvested in two hours and a quarter.

In what condition is the wheat left, and how is the work done, where the grain is lodged?

* The hogs are the gleaners in this section of country.

The machine leaves the wheat in gavels large enough for a sheaf, and where the grain stands well enough to make fair work with a cradle, it leaves the straw in as good condition to bind, as the gavels of a good reaper. Whether the grain stands or is lodged is of little consequence, except as to the appearance of the sheaf, and the necessity of saving more straw, when lodged, than is desirable. The condition of the sheaf, when the grain is lodged, depends much upon the adroitness of the raker.

What number of hands, and what strength of team is necessary to manage the machine advantageously?

Two men, one to drive the team and the other to rake off the wheat, and two horses, work the machine; but when the grain is heavy, or the land mellow, a change of horses is necessary, as the gait of the horses is too rapid, to admit of a heavy draft. The horses go at the rate of four to five miles an hour, and when the growth of straw is not heavy, a fair trot of the team is not too much.

Is the machine liable to derangement and destruction from its own motion?

This is a question which cannot be so directly answered as the others. We have only used the machine to cut about fifty acres, and have had no trouble; judging from appearance so far, should say it was as little subject to this evil, as any machinery whatever. The wear upon the cutting part being so little as to require not more than fifteen minutes sharpening in a day, there is no loss of time on this score.

Is the sheaf a good one to thresh?

The man who has fed the threshing machine with the grain of twenty acres cut by this machine, says the sheaves are much better than those of cradled grain, and quite as good as those of a reaper.

There is one more advantage beyond ordinary inquiries, of consequence where so much grain is raised as in this valley; be the grain ever so ripe, there is no waste of grain by any agitation of the straw, and all the waste, which can take place must arise from the handling and shaking in binding.

I am yours, &c.,

WILLIAM C. DWIGHT.

Moscow, Liv. co., Nov. 14, 1834.

N. B.—The machine we used was intended only for upland, but by some little alterations and additions, we used it with equal facility, on all kinds of soil; and it can be used on any farm so clean from stumps and stones as not to endanger the blocking of the wheels.

For the Genesee Farmer.

Use of Lime as a Manure.

Friend Tucker—I have read the communication of one of your correspondents, on the subject of lime as a manure. If he is a practical agriculturist of the liming system, he must have made discoveries which set at defiance the principle of experimental liming, both in England and America, as far as I am acquainted, when his "ideas" are that five bushels of lime are as good to an acre as fifty. In the former, it is said 300 are frequently applied to an acre; and in the latter, I have generally known from 50 to 100 bushels used, in proportion to the quality of the soil, and always with good success; although in

some instances the soil has been surcharged and injured for some time, though ultimately it has produced the effect intended. I think a granitic soil will not admit the same quantity as a calcareous. I find in my practice, on a soil of the latter description, seventy-five bushels producing a greater effect on an acre than fifty.

In a subsequent communication he inquires whether any thing but carbonic acid is food for plants? I would refer him and his readers to Turner's Chemistry, page 411.

I believe practical, experimental farming will do more in the present day to advance the science of Agriculture, than theoretical speculation.

Flushing, Ohio. OHIO FARMER.

For the Genesee Farmer.

Practical Hints.--No. II.

"An ounce of prevention is better than a pound of cure."

UNRULY CATTLE.

Unruly cattle or horses are certainly one of the greatest grievances to which a farmer is subject, and it is now one of the most common. Nothing is easier than to have unruly animals; and if you raise them, nothing easier than to prevent it. Just leave your fence or bars so that your ox or horse, with a little effort, may get over, yet not so as effectually to prevent him, and you will soon find him where he ought not to be. Drive him back, and put up another rail or bar, and but one, (two or three would nip his roving propensities in the bud;) let him get over that; proceed in this way a few days, and soon a five barred gate, or an eight rail fence will form but a trifling impediment in his career. Keep your fences in such repair that no calf or colt that you raise shall ever dream of getting out of the field in which he is placed, and you, of your own stock, will have no unruly cattle. Some farmers use, if we may judge from the number and size of these appendages to their cattle and horses, timber enough in the manufacture of pokes and clogs to make very respectable repairs to their fences. In traveling through the country it is easy to see that some farmers are always troubled with unruly flocks and herds, while others are entirely exempt from such a plague; and it is also easy to see that the great secret of exemption lies in the prevention and not in the cure.

—

CANADA THISTLES.

Experience has proved that the Canada Thistle may be easily eradicated if taken in season, and before the roots have time to penetrate the earth deeply, and multiply their endless ramifications. The farmer is reaping his wheat, mowing his meadow, or hoeing his corn, sees a stalk of the thistle. It is but a single plant, the growth of the season, or at most of but one or two; he knows that by digging it out thoroughly the plant is ended, and a patch of thistles nipped in the bud; but he has no time then; he will remember and do it hereafter; the place is forgotten, the thistle vegetates and spreads at its leisure,—and when he meets it again it is a bristling growth of a rod square, well rooted, and almost bidding defiance to extermination. Half a day spent in digging out a single thistle, is time well spent, if it prevents an introduction of that formidable weed. The same remarks apply to the prevention of Johns wort, or any noxious weed; they must be taken early or never; freedom from them depends more on the prevention than the cure. W. G.

For the Genesee Farmer.

Keep your Farm Implements in

REPAIR.

MR. TUCKER—I once had a load of hay to deliver a few miles off, and I gave directions to one of my hands to get the rigging on the wagon and load up. The rigging was old and rather rickety. But I thought we would make it do this time, as it would take some time to make another.

The hay was loaded, but long before it reached the place, the rigging broke down, and after a great deal of trouble and loss of time the hay was delivered.

I had another load to deliver next day. As usual I thought we had *no time* to make a new rigging, and as I had promised the hay, it would not do to disappoint my customer.

"We can borrow one of neighbor John" said my man. "Very well," said I, and he went.

But, as my grandfather used to say, "he who goes borrowing goes sorrowing." Neighbor John lived near a mile off, and after being gone more than an hour, my man returned without it—it was too large for my wagon. The result was, after spending half the morning, I was obliged to give up drawing hay that day, and disappoint my customer after all.

I then determined to remedy the matter in the only rational way, and next day was spent in making a good strong rigging for hay and another for wood.

This simple incident is like a thousand others among our farmers. We often use our farming conveniences until they break down, before we attempt to provide new ones. We spend time in borrowing sometimes what would take but little longer time to make. We think we have *no time*. Let me advise once more, what I practice now myself. Do your repairs in season, and dont neglect "*rainy days.*" POOR RICHARD.

Milo, Yates co., Nov., 1834.

From the New England Farmer.

Farmer's Work for November.

BOG FENCE.

A writer in a Southern paper observes, "This is the season [November] of the year to clear meadows of the bogs that frequently grow on low lands, and I would recommend from my own experience, to cut up the bogs and build fence with them, by which means the land is doubly benefited; first, by clearing it of that which is injurious, and secondly, by making a fence which is equally substantial with that made of stone, independent of its compactness: After having tried different methods, I would recommend laying them after the manner of stone fences; on low and wet lands, it will settle much slower than on upland; the wild grass will cease to grow and a spear grass commence, which in two years will connect the bogs. I would advise laying this fence three feet at bottom, and four feet high, with one lateral rail supported by stakes at each end, usually termed "stakes and rider," which will keep it in place. Although it settles considerably the first year, and gradually afterwards, I am convinced from four years' experience, that it will endure ten years without any additional bogs, and it can be laid up at one-tenth expense of that which is made from stone.

SWINE.

A good sty is of the utmost importance in fatting hogs. Nor is it of less importance for keeping them in winter; as the more comfortable they are kept, the less nourishment they require. The sty should be proportioned in size to the number of swine it is to contain. One of sixteen feet by twelve, is probably sufficient for eight fatting swine. It should be divided into two apartments; that in the rear which should be about six feet wide, should be close and warm for the hogs to lie in. There they should have a constant supply of dry litter when the weather is cool, for it is an essential point to keep them comfortable. The front part of the sty which would then be about ten feet wide, should have the floor descending on one side for the filth to run off; and in this side should be an opening. The trough should be on the upper side, covered with one or more lids; and upright pieces should be set before it, at such distances apart as that one hog only could put his head between any two of them, in order that when feeding, the weaker animals should be protected against the stronger. The whole should be covered with a roof, for it is essential that they should be protected from storms, while they are in the outer or feeding apartment. According to the foregoing, if sixteen hogs are to be kept or fatted in the stye, it should be thirty-two feet long, and twelve wide, and in that case there might be a sleeping apartment at each end. These apartments should be again subdivided, that, for the quiet of the animals particularly in fatting, too many may not be forced to lie together. It would probably be best also to divide the feeding apartment; for too many hogs kept together, are not apt to enjoy that peace and quiet *which is necessary to their fatting well.* Posts should also be set up in the sty for hogs to rub themselves. If thirty two hogs are to be kept or fatted, then perhaps the best way is to have two styes of the dimensions last described, placed together, but with a roof over the whole, and a passage between them for the purpose of carrying food to the troughs. If a part of the roof extended considerably beyond the sty, it would afford a convenient cover for forming a heap of compost from the dung of the swine.

THE FLYING WEEVIL.

We are informed by a friend, that an easy and effectual preservative to the ravages made in wheat and other grain by the *Flying Weevil*, will be found in strewing over, and mixing through the threshed grain *slacked lime*—that a peck of lime will answer for a thousand bushels. Those having their grain in stacks will do well to thresh it immediately and resort to this simple mode of preventing its entire destruction. The grain can easily be cleaned from the lime by screening. The remedy is practiced as we are informed in the Southern States, where the Weevil has been for some years very destructive to grain.—*Ohio paper.*

CUT FODDER.

"Cut or chaff your hay, straw, corn tops or blades, and even your stalks with a straw cutter, and you will save a great proportion which is

otherwise wasted or passed through the animal without contributing to its nourishment. One bushel of chaffed hay at a mess given in a trough, three times in twenty four hours, is sufficient for a horse, ox, or cow. A bushel of chaffed hay, lightly pressed, weighs from five to five and a half pounds. A horse or horned beast thrives more on fifteen pounds thus given, than on twenty four or twenty five pounds as commonly expended (including waste) in the usual manner of feeding in racks; to which troughs properly constructed, are far preferable.

"Feeding your stock by weight and measure of food, will not only save your provender, by its orderly distribution, but frequently save the lives of animals, too often starved by niggardliness or gorged and injured by profusion. If it be true, as it is, that "the master's eye makes the horse fat," it is equally so that the master's eye prevents the horse from being pampered, wanton bloated, foundered, and finally wind broken and blind."—*Judge Peters.*

STORE KEEP FOR CATTLE,

Should neither be too rich nor too abundant and if an ox is once made fat, and then loses his flesh, he is like one of Pharaoh's lean kine, the more he devours the leaner he becomes. If young cattle are kept in rich pastures in summer, and poor fodder in winter, sometimes stuffed, at other times starved, they lose their disposition to fatten.

Gardener's Work.

DECEMBER.

The severity of the weather in this month generally allows but little to be done in the Middle and Northern States. If the weather continues open, carry out and spread manure, and trench the ground. Provide from the woods, &c. peasticks and bean-poles, of suitable lengths and sizes. Collect all your old sticks and poles, which are still fit for use, and place them together with your new ones under cover, to prevent their rotting. Be careful to shut the frost out of the apartments in which you have stored your fruit for winter and spring use. Examine the fruit which you have on shelves in cellars, once every ten days, and take away any that you find tainted. Repair all decayed trellises, espaliers, &c. Procure stakes &c. which may be wanted in a more busy season.—*Fessenden's New American Gardener.*

Wool Fairs.

A writer in one of the New England newspapers suggests the establishment of an annual wool fair. This appears worth attending to, as the convenience of both buyers and sellers is promoted by their having a general place of meeting. In England there are horse fairs, sheep fairs, cattle fairs, hop fairs, and probably many others; in Germany book fairs, linen and cotton fairs, wool fairs, and the like: whereas almost the only fairs in this country are fancy fairs! These latter usually offer a most attractive scene from the numbers of beautiful females who grace the stands; and they are often made beneficial to some public charity; but they do not subserve the great interests of agriculture or manufactures.

Were an extensive wool-fair established, it is probable that farmers and graziers would pay more attention than they now do to the growth of their flocks, in which case this country might supply England with a large part of that quantity which she now imports from Spain and Germany. The coarse wool she obtains from her own sheep, but the fine she is compelled to import from countries having a different climate. As this country possesses every apparent advantage of soil and climate, she might, with proper attention, soon rival any other country in the world.—*Baltimore Gaz.*

From the Boston Courier.

Farms in Middlesex.

The report on farms, &c made to the Middlesex Agricultural Society, at the late Cattle Show in Concord, contains some interesting notices—interesting to readers of all professions, and encouraging to farmers and horticulturists. We annex an abstract of the report on two or three farms.

Captain Moore's Farm, in Concord, contains about sixty acres, nearly all of it low swamp and meadow land; in 1826, one or two acres only were thought worth cultivating, and not more than one cow could be kept on the land. From 1830 to 1833, there were from 30 to 40 tons of English hay cut annually; during the winter of 1833 and '34, three horses and thirty-three head of cattle were wintered, and thirty-five tons of hay were sold. The method of reclaiming this land has been various: some of it by taking off the turf, and carting in gravel and sand, with a little manure and hayseed; some by covering the soil with gravel, and some by ploughing. Covering the soil with gravel is thought to be the best method, by Mr. Moore, taking the expense into consideration. Capt. Moore has not been able to make an estimate of the expense of reclaiming the whole, or one acre; but is fully of the opinion, that one or two crops will pay the labor of preparing the land. It now yields from 1½ to 3 tons of hay to the acre.

Mr. Rice's Farm, Marlboro, is a light thin soil composed of sand, loam and gravel, except the woodland and pasture. In 1804, when Mr. Rice commenced on this land, it stood in the reduced valuation of the town at $30; it now stands at $216, making an increase of about seven fold. The stock kept on the farm in 1804, was one horse, two cows and three sheep, with the assistance of the highway. The buildings were of little value, the dwelling house not a safe residence in storms,—not a rod of wall on the farm—nothing but rail and bush fences. The farm now keeps one horse, eighteen or twenty head of cattle, and a few sheep. The owner sells from 50 to 100 bushels of grain annually, and about 60 barrels of cider; and in the last 15 years he sold pork to the amount of $1,041, great quantities of turkeys and poultry, and butter to to the amount of $1295, besides hay. There is now on the farm a new house and barn, shed and other out buildings in good repair; a good proportion of stone wall and substantial fence.

The improvements on this farm have been made by collecting manure from the low land, and the banks of fields, that have been thrown out by the plough, from hedge-fences that have been rotting for ages, and the sides of the highway: mixing these together and passing it through the cow and hog yards. By these means, the farm has received a new appearance, and turned from a barren waste into a fruitful field.

Mr. Asa Parker's Farm, in Acton, contains 100 acres. The soil of the greatest part is loam and gravel, with a mixture of sand; most of the improved land is free from rocks, poor and light, and very easy to cultivate. Several acres are on a hill, of rich strong soil, covered with rocks, and bear large crops when cultivated. In 1824, the produce was six tons of English hay, and grain, potatoes, apples, &c. in like proportion. The buildings and fences out of repair. Now there are raised on the same land about thirty tons of English hay, 125 bushels of corn, 100 of oats, 30 of rye, 225 of potatoes. The two last seasons it wintered fifteen head of cattle and nine horses. There are 330 engrafted apple trees in a thriving state; 600 rods of wall, the rock mostly moved in the winter. Mr. Parker has made about 200 loads of compost manure, yearly. He has subdued 16 acres of brush pasture by ploughing and hoeing, and now half a day's work will mow all his bushes. Eleven acres of new land, hard and rocky, have been brought into a state of cultivation, and produced two tons of English hay to the acre the first five years.

From the Northampton Courier.

Agricultural Societies.

Extract of a letter to the Secretary of the Hampshire, Franklin and Hampden Agricultural Society, dated Albany, April 16, 1832.

Sir—It is now some years since our County Agricultural Society became extinct. During its existence premiums were liberally awarded on Farms, Crops, Stock and Household productions. The same objections were raised against giving bounties upon great crops and great cattle that you speak of; but these objections came from those who were either unsuccessful competitors, or who, having predicted evil, were anxious to see their predictions verified. Now that those feelings have subsided, all seem to appreciate and acknowledge the advantages which have grown out of the labors of the society. Our implements have been greatly improved,—superior stock has been introduced,—alternation of crops is better understood, and more generally adopted, —manures are more carefully saved and better applied,—a general spirit of inquiry, and of commendable competition has been awakened, and I think the same amount of labor now is 20 or 25 per cent. more productive, in consequence of agricultural societies, than it was before their formation. Farmers are tenacious of old habits, and are apt to be timid in all experiments that involve uncertainty. But when when they have seen their neighbors produce better crops, or finer cattle, and display greater industry and neatness, the example becomes contagious. They then begin to acquire the first requisites for improvement—a consciousness that they want knowledge. It is from this conviction, that mechanics often make the best farmers. They *feel* that they have all to learn, and with habits of industry and frugality, and without prejudice to bind them to any particular system, they seek information from the best farmers, and adopt the course which experience teaches to be the best.

The county of Jefferson has sustained its society to this day. Its horses are decidedly superior, and its neat cattle no wise inferior to those of any other county in the state. The improve-

ment is equally apparent in every other department of husbandry.

Our premiums, in two instances, were perhaps singular. We awarded for the most *profitable* crops, deducting from the value of the product, the expense of producing it. This was calculated to blend skill with economy. Again, we gave premiums for the most profitable rotation of crops, of three or four years. This was intended to show the importance of alternating crops of dissimilar habits, and of demonstrating the bad policy of keeping under the plough, or in grass, in perpetuity. Live fences, in districts destitute of stone, is one of the *most desirable* improvements that can be introduced; and the culture of roots, as a field crop, as food for cattle, and particularly for sheep, in the winter, promises great advantages. Their culture, except that of the potatoe, is an innovation upon old habits; and it will yet be some time ere the proper implements are introduced to raise them to full advantage. Take for instance ruta baga—with ordinary farm implements, it would require some days labor to sow an acre properly in drills—with a drill barrow a man will sow four ar five acres in a day—and with a cultivator and kim hoe, four fifths of the labor of cultivation, or what is termed after culture, is saved. I kept an accurate account of the expense of three acres, and charged the crop with fifty loads of manure, at 75 cents the load. On footing up, after the crop was pitted for the winter, I found the cost to exceed a fraction 2½ cents per bushel. I fed four bullocks with them, at the rate of two bushels each per day. They ate very little else and throve remarkably. I have uniformly, for years, fed them to my cows and oxen, daily, from March to May or June.

JESSE BUEL.

From the Northampton Courier.

Large Heifer.

Mr. Atwill—I have this morning seen and weighed on my scales, a very fine heifer calf, an account of which, as given me by the owner, may be gratifying to such of your readers as take an interest in the great subject of the improvement of stock. The heifer I speak of is six months old to-day, and weighs 487 lbs. She belongs to Messrs. Huntingtons of Hadley. She was sired by their full blooded Durham bull Nelson, (of the improved short-horned breed,) and her dam was also of English blood; but this is her first calf. When one month old, she weighed 150 lbs.; having gained 42 lbs. in 31 days, But her weight has increased in a much greater ratio since that time, her increase since the 1st of June having been 337 lbs.—which gives an average of about 2¼ lbs. a day. She ran with her dam 3½ months. She was not exhibited at the late fair at West Springfield on account of the distance; and this may serve as an apology for troubling you with this communication.

N. COOLIDGE.

Hadley, November 1, 1834.

Salt Water on Plants.

After an inundation of Friesland, in 1825, the oak, the mulberry, pear, and peach trees, and deep-rooted ones, did not suffer; nor the asparagus: the onions, celery, pumpkins, and some others, were never finer. But the vines and gooseberries contracted a salt taste, and the apricots, apples, cherries, poplars, elms, beech, and willow, could not stand it. They pushed out a few leaves, and then declined.—*Bull. Univ.* 1829, *p.* 225.

Curiosity---Bees.

Mr. Francis Kelsey, of Lockport, showed us yesterday afternoon what he calls a natural curiosity, but which we think the greatest *artificial* curiosity that we have seen for a long time. It is a glass tumbler full of honey, wrought up in a comb of the most curious construction, and at the same time leaving the glass perfectly transparent. He has, we understand, at No. 29 Mulberry street, a number of these most singular specimens of *natural art*, if we may be permitted to use the seeming solecism that really comes nearest a description of them. He has with him eight swarms of Bees in glass hives, each containing several apartments, in which the bees, by his experience and skill, were compelled to work. Mr. Kelsey has been engaged for years in the management of the Honey Bee, and has at length completely succeeded in controlling their operations as he pleases. His exhibition will convince any one, he says, that the opinions of naturalists as to the habits and customs of the bee, have been heretofore erroneous. On the whole, it is a very great curiosity—and such a one as Virgil never dreamed of. He wishes to procure a suitable room, for the purpose of exhibiting his hives more conveniently to the curious.—*N. Y. Courier.*

Meteorological Table,

KEPT AT ROCHESTER, FOR NOVEMBER, 1834.

	10 A. M.				10 P. M.			
Days.	therm.	barom-eter.	winds	sky	therm.	barom-eter.	winds.	sky.
1	40	29,80	E	cloudy	38	29,80	E	cloudy
2	45	29,85	E	do	36	29,85	s E	fair
3	47	29,75	S	do	43	29,70	S	do
4	56	29,55	S	fair	52	29,45	S	cloudy
5	47	29,65	W	do	40	29,80	N W	do
6	47	29,90	W	do	38	29,70	W	do
7	50	29,50	W	do	48	29,50	W	do
8	42	29,70	N	cloudy	34	29,75	N W	fair
9	53	29,60	W	fair	55	29,55	S W	do
10	53	29,60	W	do	38	29,55	W	do
11	44	29,60	N W	do	38	29,55	N W	do
12	40	29,45	W	cloudy	40	29,50	W	do*a*
13	42	29,50	S W	do	55	29,15	S	do
14	48	29,10	N W	do	33	29,20	N W	cloudy
15	20	29,30	N W	do	24	29,50	N W	fair
16	33	30,00	E	fair	34	30,05	N E	do*b*
17	32	29,75	E	cloudy	34	29,65	N E	cloudy
18	38	29,45	E	do	37	29,45	N	do*c*
19	40	29,40	W	do	38	29,35	N	do
20	40	29,45	N	do	37	29,50	N	do
21	42	29,50	W	do	38	29,40	N W	do
22	42	29,25	S	do	38	29,10	N W	do
23	36	29,25	N W	do	32	29,35	N W	do*d*
24	32	29,30	N	do	32	29,35	N W	do*e*
25	38	29,40	W	fair	33	29,45	N W	fair
26	32	29,50	N W	do	28	29,60	N W	do*f*
27	38	29,60	W	do	36	29,55	W	do
28	42	29,55	S W	do	38	29,50	W	cloudy
29	48	29,15	S W	cloudy	38	29,20	W	do
30	38	29,55	N W	fair	35	29,75	W	fair

Means.—Ther. 40°—Barom. 29.37—depth of rain, 1.8 inch—snow 2 inches.

a Snow—*b* spr. water 46°—*c* snows—*d* snows—*e* snow 1 inch—*f* snow.

PRICES CURRENT.

ARTICLES.	PER	*Dec.* 6. ROCHESTER.	*Dec.* 1. NEW-YORK.
Ashes—Pot....	100lbs.	$3,40.....	$4,10 *a* 4,20
—— Pearl..	.....	3,60.....	5,10 *a* 5,25
Beeswax, yellow	lb.	0,18 *a* 0,20	21 *a* 22
Candles, mould	.....	0,12 *a* 0,00	13. *a* 14
—— dipped.	.....	0,11 *a* 0,00	11 *a* 12
Cloverseed.....	.....	6½..... ...	7 .*a*.7½
Flax, American.	.....	.....	7½..*a*.08
Flax seed, clean	tierce	9,00*a*10,00	12,50*a*13,00
Flour, Western.	barrel	4,75.....	5,06*a* 5,18
Grain, Wheat..	bushel	0,75*a*.0,00	1,05 *a*1,08
—— Rye....	.....	0,50.....	70.*a*..75
—— Oats...	.....	0,28..*a*..30	40.*a*..41
—— Corn...	.....	0,50.....	62.*a*..68
—— Barley..	.....	0,50..*a*..00	65.*a*..67
Hemp, Americ'n	ton	.....	100 *a* 120
Hops, 1st sort .	lb.	0,20.....	17.*a*..20
Plaster Paris...	ton	6,50 *a* 0,00	2,00 *a*2,12
Beef, Mess....	barrel	7,50 *a*.9,00	8,75 *a* 9,50
—— Prime....	.....	5,50 *a* 0,00	6,25 *a* 6,50
Pork, Mess....	.....	15,00*a*00,00	13,50*a*14,50
—— Prime....	.....	10,00.....	9,00*a*9,50
—— in the hog.	100lbs.	4,00.....	5,00.....
Tallow.....	.....	6,00 *a* 7,00	6,50 *a* 7,00
Hay.....	ton	8,00 *a* 10,00	9,75*a*11,20
Apples.....	bushel	50.*a*.100	.....

Monroe Horticultural Garden & Nursery.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

Orders by mail or otherwise will be promptly attended to, and packages delivered in Rochester, or at the Canal one mile from the Nursery.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Monroe* co. N. Y. Sept. 13, 1834.

Rochester Seed Store and Horticultural Repository.

REYNOLDS & BATEHAM, are just opening at their store, No. 60, Buffalo-st. (Eagle Block) a large assortment of seeds of English, French, German and American growth. Their assortment is nearly complete, and additions will constantly be made as fast as importations of the new crop arrive. Their collection embraces a variety of new and valuable kinds, well worthy the attention of farmers, suchas Hopeton and Early Angus Oats, English Potatoe do., (weighing 44 lbs. to the bushel,) Winter Tares or Vetches, Spring do., Orchard Grass, Pacey's Perennial Rye Grass, Lucern, Trefoil or Yellow Clover, Trifolium incarnatum, or Flesh Colored Clover, Sainfoin, Millet, Mangold Wurtzel, &c. Also, Top or Tree Onion, and a few Potatoe do. A Green House and Horticultural Garden are in progress, and all orders for Seeds, Trees, Shrubs, Grape Vines, Green House Plants, &c. will be faithfully executed.

Rochester, Oct. 25, 1834. oct 25

Peach Trees.

A FEW hundred *Peach* and *Nectarine* trees, consisting of select varieties, propagated from trees whose *genuineness has been proved by examinations of the fruit*; and a few plants of hardy American grapes—for sale by J. J. THOMAS,

Greatfield, near Aurora, Cayuga co

Moubray's Treatise on Poultry, &c.,

WITH abridgements and additions by the Editor of the New England Farmer, price 50 cts. For sale by HOYT PORTER & Co.

From the Spanish of Luis de Leon.

On Heavenly Life.

TRANSLATED BY BRYANT.

"Region of life and light!
Land of the good, whose earthly toils are o'er!
Nor frost nor heat may blight
Thy vernal beauty! fertile shore,
Yielding thy blessed fruits forever more!

"There without crook or sling,
Walks the good shepherd; blossoms white and red
Round his weak temples cling;
And, to sweet pastures led,
His own loved flock beneath his eye are fed.

"He guides, and near him they
Follow delighted; for he makes them go
Where dwells eternal May,
And heavenly roses blow,
Deathless and gathered but again to grow.

"He leads them to the height
Famed of the infinite and long sought Good,
And fountains of delight;
And where his feet have stood
Springs up, along the way, their tender food.

"And when in the mild skies,
The climbing sun has reached his highest bound,
Reposing as he lies,
With all his flock around,
He watches the still air with modulated sound.

"From his sweet lute flow forth
Immortal harmonies, of power to still
All passions born of earth,
And draws the ardent will,
Its destiny of goodness to fulfil.

"Might but a little part,
A wandering breath of that high melody,
Descend into my heart,
And change it, till they be
Transformed and swallowed up, oh love, in thee;

"Ah then my soul should know,
Beloved! where thou liest at noon of day,
And from this place of woe
Released should take its way,
To mingle with thy flock and never stray."

American Cities.

Few things in relation to this country are more likely to excite the admiration of Europeans, than the rapid growth of cities; not of a capital *simply, but of numerous* ones in the same State. Look at New York State. About thirty years ago, the place where Utica now stands was a forest; and the same may be said of the sites of Buffalo, Rochester, Lockport and other pla.ces, within a much shorter period. Rochester has a population upwards of 10,000, and appears destined to become an important city, as its commercial advantages are great.

Look at Ohio. That State is altogether of a recent formation; yet how many cities does it contain! Cincinnati is regarded by the inhabitants as a second Philadelphia, it being built on the same plan, that is, with streets intersecting each other at right angles;—a plan, convenient enough, but not tasteful, because it wants variety. Its population, there can be little doubt, is much greater than was that of Philadelphia at a similar period from its foundation, and its buildings more elegant. Cleaveland, on Lake Erie, is rising into importance, and will probably, at no distant day, rival Rochester. From a newspaper published there—for towns and even villages have their political journals in this country—we learn that the formation of a Lyceum is in progress; a circumstance of auspicious appearance, as the west has been generally considered to be neglectful of mental culture. There is no reason to doubt that in the course of another twenty years, Ohio will exhibit as much talent and literary taste as other States long since settled. How cheering is the prospect!—Who can fail in contemplating it, to be struck with admiration! Campbell, in his pleasures of Hope, that poetical gem, thus adverts to the subject; and we offer no apology for citing good poetry, especially when it relates to our own country.

"Come, bright improvement! on the car of time,
And rule the spacious world from clime to clime;
Thy handmaid arts shall every wild explore,
Trace every wave, and culture every shore.
On Erie's banks, where tigers steal along,
And the dread Indian chants a dismal song,
Where human fiends on midnight errands walk,
And bathe in brains the murderous tomahawk;
There shall the flocks on thymy pastures stray,
And shepherds dance at summer's opening day;
Eace wandering genins of the lonely glen
Shall start to view the glittering haunts of men,
And silent watch, on woodlands heights around,
The village curfew as it tolls profound."

Little, it is probable, did Campbell imagine, that his prediction would be fulfilled in the litetime of the poet. Yet, after what he has lived to witness, he might now venture on a still bolder one, by extending his views from Lake Erie to the Rocky Mountains, and beyond them to the shores of the Pacific. The triumph of civilization over savage life across the continent of America, is proceeding, like the sun, from the east to the west, and will probably extend even across the Pacific, to those regions in Asia, where the Christian religion has yet to achieve a mighty revolution. The present generation may not live to witness it; but it is written in the book of fate.—*Balt. American.*

Sepulchral Cave in South America.—In the shady and solitary place, on the declivity of a high mountain, opens the cave of Ataruipe. It is less a cave than a projecting rock, in which the waters have scoped a great hollow when, in the ancient revolutions of our planet, they had reached to the height. In this tomb of a whole extinct tribe was soon counted nearly 600 skeletons in good preservation, and arranged so regularly that it would have been difficult to make an error in numbering them. Each skeleton rests upon a kind of basket formed of the petioles of palms. These baskets, which the natives call *mapires*, have the form of a square bag.—Their size is proportional to the age of the dead; and there are even some for infants which had died at the moment of birth.—We saw them from ten inches and a half to three feet six inches and a half in length. All the keletons are bent, and so entire that no rib or a bone of the fingers and toes is wanting. The bones have been prepared in three different ways; whitened in the air and sun, dyed red with aroto, a coloring matter obtained from the *bixa orellanx*; or, like mummies, covered with odorous resins, and enveloped in leaves of heliconia and banana. The Indians related to us that the corpse is first placed in the humid earth, that the flesh may be consumed by degrees. Some months after, it is taken out and the flesh that remains on the bones is scraped off with sharp stones. Near the mapires or baskets there were vases of half burnt clay, which appeared to contain the bones of the same family. The largest of these vases or funeral urns are three feet two inches high, and four feet six inches long. The handles are made in the form of crocodiles or serpents, and the edge is encircled by meanders, labyrinths, and greeques, with narrow lines variously combined.—*Humboldt.*

Industry and Perseverance.

The following is an extract from one of Mr. Sharp's Letters and Essays, recently published in London:

"There are few difficulties that hold out against real attacks; they fly like the visible horizon before those who advance. A passionate desire and an unwearied will can perform impossibilities, or what seem to be such to the cold and the feeble. If we do but go on, some unseen path will open among the hills. We must not allow ourselves to be discouraged by the apparent disproportion between the result of single efforts and the magnitude of the obstacle to be encountered.—Nothing good nor great is to be obtained without courage and industry; but courage and industry must have sunk in despair, and the world must have remained unornamented and unimproved, if men had not nicely compared the effect of a single stroke of the chisel with the pyramid to be raised, or of a single impression of the spade with the mountain to be levelled. All exertion, too, is in itself delightful, and active amusements seldom tire us. Helvitius owns that he could hardly listen to a concert for two hours, tho' he could play on an instrument all day long.—The chase, we know, has always been the favorite amusement of kings and nobles.—Not only fame and fortune, but pleasure is to be learned. Efforts, it must not be forgotten, are as indispensable desires. The globe is not to be circumnavigated by one wind. We should never do nothing. "It is better to wear out than to rust on," says Bishop Cumberland. "There will be time enough for repose in the grave," said Nicole to Pascal. As a young man, you should be mindful of the unspeakable importance of early industry, since in youth habits are easily formed, and there is time to recover from defeats. An Italian sonnet justly as well as elegantly compares procrastination to the folly of a traveler who pursues a brook till it widens into a river, and is lost in the sea. The toils as well as risks of an active life are commonly underrated, so much may be done by the diligent use of ordinary opportunities; but they must not always be waited for. We must not only strike the iron while it is hot, but strike it till it is made hot. Herschel, the great astronomer, declares that ninety or one hundred hours clear enough for observations, cannot be called an unprodnctive year. The lazy, the dissipated, and the fearful, should patiently see the active and the bold pass them in the course. They must bring down their pretensions to the level of their talents. Those who have not energy to work must learn to be humble, and should not vainly hope to unite the incompatible enjoyments of indolence and enterprise, of ambition and self-indulgence. I trust that my young friend will never attempt to reconcile them."

The Date Palm.—The Savannah Georgian states that John Couper, of St. Simmons, has succeeded in cultivating the Date Palm Tree on his plantation—and has exhibited at the News Rooms in Savannah a branch from one of these trees which is clustered with this golden fruit. The whole number of dates on this branch being about 200. The fruit is not yet ripe. Inside it is firm and fleshy, with a sub-acid but not disagreeable taste. Mr. Couper has about fifty date trees on his plantation, where he has succeeded in raising a large number of *Olive* trees.

The *Palmetto* flourishes in Georgia and Florida, and there seems to be no sufficient reason why the Date Palm may not also be cultivated to almost any extent.

Franklin, a town in Massachusetts, containing 1700 inhabitants, manufactures straw hats and bonnets to the amount of from $75,000 to $80,000 dollars a year—all done by females.